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Ascertained record of the Green Turtle, *Chelonia mydas* (L., 1758) in the Tyrrhenian Sea (Testudinata, Cheloniidae)

Abstract - A living *Chelonia mydas* has been recently reported from the waters of N. W. Sicily, Tyrrhenian Sea (Aspra, Gulf of Palermo). Considering this rare event, the authors give a brief review of the documented records of the Green Turtle along the Southern Italian coasts.

Keywords: *Chelonia mydas*, sea turtle, Tyrrhenian Sea.

Riassunto - Accertata presenza di *Chelonia mydas* (L., 1758) (Testudinata, Cheloniidae) nel Mar Tirreno.

Gli autori comunicano il rinvenimento di un individuo di *C. mydas* nelle acque del Golfo di Palermo (Mar Tirreno). La presenza di questa specie in acque italiane viene discussa passando in rassegna le precedenti segnalazioni; fra queste alcune, considerate non attendibili, hanno prodotto ripetuti errori nella letteratura internazionale di riferimento.

Parole chiave: *Chelonia mydas*, tartaruga, Mare Tirreno

Chelonia mydas is the most endangered sea turtle of the Mediterranean Sea and it has occurred very rarely in European Mediterranean waters (Argano, 1992; Lescure, 1997). In particular, this species was rarely observed in Italian seas: two juveniles recorded by De Betta (1870) for the Adriatic sea, namely in the harbour of Ancona in 1830 and at Malamocco, Venice, in 1864. Despott (1930) mentioned the capture of two Green turtles in the Maltese waters, 12. X. 1929.

More recently Basso (1992) listed four records: one specimen caught at Bari, VII.1986, two more individuals captured at Porto Cesareo, Lecce, on 28. X. 1987 and 28. VII. 1990, and another one taken at Capo Rosocolmo, Messina, on 29. VI. 1990.

The presence of *C. mydas* along the Apulian coasts has been stressed

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recently by Rositani *et al.* (1998). In the collections of the Museo di Ecologia of Marano sul Panaro (Modena, Italy) there is a specimen found in Lampedusa in 1973 (379-AR ex B. Ruini collection). Lescure (1997) refers to a capture which occurred allegedly in Lampedusa in 1983. This report refers instead to the specimen captured near Lampione in the summer 1983 reported by Gramentz (1989). Finally, a juvenile has been recently collected in the waters of La Spezia gulf on 11. IX. 1997 and is preserved at the Museo Civico di Storia Naturale «G. Doria», Genoa, (Doria, 1998). On 11 May 1998 an individual of this species was captured alive by a diver near the coastline of Aspra (Gulf of Palermo) (Figs. 1 and 2). The turtle showed obvious abrasions to the neck and to the front flippers caused by a trammel



Fig. 1 - The individual of *Chelonia mydas* captured by a diver near the coastline of Aspra (Gulf of Palermo, 11.V.1998).



Fig. 2 - Detail of the head of the individual.

net. After a week of cares in captivity it was released in the same area where it was found. On 22 June, the same turtle was taken by another diver near Bandita (approximately four miles S. W. of Aspra); this time, a piece of fishing-line was protruding from its cloaca. Subsequently an X-ray inspection ascertained that the turtle had ingested also a fish-hook. At the end of July 1998, after the natural evacuation of the foreign body, the animal in good condition was marked and released in the waters of the Marine Reserve of Ustica (Palermo). In Table 1 we give biometric and meristic features of this individual.

Table 1 - Morphometric and meristic features of *Chelonia mydas* taken at Aspra (Palermo) (linear measurements are expressed in cm, weight in kilograms).

Total length	45	Lateral scutes	4	4
Carapace length curve-line	37.8	Ventral scutes	6	6
Carapace length straight-line	35	Marginal scutes	11	11
Carapace width curve-line	36.4	Inframarginal scutes	4	4
Carapace width straight-line	30.3	Postcentral scutes	1	1
Plastron length	31	Postorbital scales	4	4
Plastron width	29.1	Prefrontal scales	1	1
Weight 1 - capture	5.04	Central scutes	6	
Weight 2 - capture	5.08	Precentral scute	present	
Head length	7.09	Intergular scute	present	
Head width	6.01	Interanal scute	absent	

As regards the recent records listed above, only those from the Adriatic and Porto Cesareo published by Basso (1992) and by Rositani *et al.* (1998) seem to be adequately documented, besides obviously the specimen from La Spezia. The capture reported for Capo Rosocolmo, Messina, by Basso (1992) cannot be accepted without some perplexities, since it does not appear to be sufficiently supported by evidence (the animal was not kept or photographed before release; it was not measured or inspected by the author or other experts); the information on its capture as published is unconvincing (how can an animal weighing 50 kilograms be collected by means of a hand-net or «coppo»?). Finally, we believe it useful to point out some mistakes reported in the literature on the presence of *C. mydas* along the Italian coasts. Bruno has repeatedly published undocumented, therefore unreliable, records in 1973, 1978 and 1986. He also reported to have counted 15 shells of Green Turtles in Sicily between 1967 and 1971, and 6 in Sardinia in 1968, without giving further details on the collecting sites or the actual location of the specimens. He wrote (Bruno, 1986, transl.) «personally I have found shells of this species at the home of some fishermen from Sardinia, Sicily, Tuscany, Apulia and Venetia». The data (Bruno, 1973, 1978, 1986) and the map of the figure 46 on page 72 in Bruno (1986) originated further mistakes concerning the presence of the Green Turtle in Italian waters in the subsequent articles by di Palma (1978), Delaugerre (1987), UNEP/IUCN (1990), Groombridge (1982, 1994) and Iverson (1992). In conclusion, the

Aspra record is very interesting since, as stated above, the actual presence of living Green Turtles along Italian coasts is a remarkable event, rarely ascertained and often controversial in the scientific literature.

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References

- Argano R., 1992 - Tartarughe marine e Foca monaca nei mari italiani: salvaguardia e prospettive. *Boll. Mus. Ist. biol. Univ. Genova*, 56-57: 113-135.
- Basso R., 1992 - Osservazioni e ricerche sulle tartarughe marine presenti nei mari italiani. *Contributi alla conoscenza dell'ambiente e della fauna salentina*. Edizione del Grifo, Lecce, 72 pp.
- Bruno S., 1973 - Problemi di conservazione nel campo dell'erpetologia. *Atti del 3° Simposio Nazionale sulla Conservazione della Natura*, Bari, 2: 117-226.
- Bruno S., 1978 - Le tartarughe nei mari italiani e nel Mediterraneo. *Natura e Montagna*, Bologna, 25 (3): 5-17.
- Bruno S., 1986 - Guida a Tartarughe e Sauri d'Italia. Giunti Martello, Firenze, 256 pp.
- De Betta E., 1870 - Fauna d'Italia, Parte quarta. Rettili e anfibi. Vallardi, Milano, 107 pp.
- Delaugerre M., 1987 - Statut des Tortues marines de la Corse (et de la Méditerranée). *Vie Milieu*, 37 (3/4): 243-264.
- Despott G., 1930 - Cattura di due esemplari di *Chelone mydas* Schw. nei mari di Malta. *Naturalista Siciliano*, XXVII, n. s., 7: 73-75.
- di Palma M. G., 1978 - Notizie sulle tartarughe marine in Sicilia (Reptilia, Testudines). *Naturalista Siciliano*, (4) 2 (1-2): 1-6.
- Doria G., 1998 - Primo reperto di *Chelonia mydas* (Linnaeus, 1758) per il Mar Ligure (Reptilia, testudines, Cheloniidae). *Doriana*, Genova, VII (303): 1-4.
- Gramenta D., 1989 - Marine turtles in the Central mediterranean Sea. *Centro*, 1 (4): 41-56.
- Groombridge B., 1982 - The IUCN Amphibia-Reptilia red data book, Testudines, Crocodylia, Rhynchocephalia. Part 1. IUCN, Gland, Svizzera, 426 pp.
- Groombridge B., 1994 - Marine turtles in the Mediterranean: distribution, population status, conservation. *Nature and environment*, n. 48, Council of Europe Press, Strasbourg, 98 pp.

- Iverson J. B., 1992 - A Revised Checklist with Distribution maps of the Turtles of the World. Privately Printed, Richmond, Indiana, USA, 363 pp.
- Lescure J., 1997 - *Chelonia mydas*. In: Gasc J. P., Cabela A., Crnobrnja-Isailovic J., Dolmen D., Grossenbacher K., Haffner P., Lescure J., Martens H., Martinez Rica J. P., Maurin H., Oliveira M. E., Sofianidou T. S., Veith M. & Zuiderwijk A. (eds.) - Atlas of Amphibians and Reptiles in Europe. Societas Europaea Herpetologica and Muséum National d'Histoire Naturelle, Paris, pag 164.
- Rositani L., De Zio V., Pastorelli A. M. & Vlora A., 1998 - Rinvenimenti di tartarughe marine lungo le coste pugliesi (1978-1997). Biol. Mar. Medit. 5 (1): 839-842.
- UNEP/IUCN, 1990 - Report on the status of the Mediterranean Marine Turtles. Map Technical Reports Series, 42, Athens, 204 pp.